

Claims

- [c1] 1. An apparatus comprising: a receptacle for receiving a plug on a computer mouse; a video game controller plug for plugging into a video game controller receptacle on a video game console; and a computer mouse code to gamepad code converter that converts computer mouse codes received from said computer mouse to gamepad codes that are output to said gamepad plug.
- [c2] 2. The apparatus of claim 1 further comprising: a receptacle for receiving a plug on a computer keyboard; and a computer keyboard code to gamepad code converter that converts computer keyboard codes received from a computer keyboard to gamepad codes that are output to said gamepad plug.
- [c3] 3. The apparatus of claim 1 further comprising: a mouse displacement to gamepad thumbstick position converter that uses the vertical and horizontal displacement information received from a computer mouse to calculate the velocity and direction of said computer mouse and maps said velocity to a vertical and horizontal thumbstick position of a thumbstick on a gamepad style video game controller.

- [c4] 4. The apparatus of claim 3 further comprising: a receptacle for receiving a plug on a computer keyboard; and a computer keyboard code to gamepad code converter that converts computer keyboard codes received from a computer keyboard to gamepad codes that are output to said gamepad plug.
- [c5] 5. The apparatus of claim 1 wherein said computer mouse code to gamepad code converter converts computer mouse codes from a second computer mouse to gamepad codes that are output to said gamepad plug, and further comprising a second receptacle for receiving a plug on computer mouse.
- [c6] 6. The apparatus of claim 5 further comprising: a receptacle for receiving a plug on a computer keyboard; and a computer keyboard code to gamepad code converter that converts computer keyboard codes received from a computer keyboard to gamepad codes that are output to said gamepad plug.
- [c7] 7. The apparatus of claim 5 further comprising: a mouse displacement to gamepad thumbstick position converter that uses the vertical and horizontal displacement information received from said computer mouse to calculate the velocity and direction of said computer mouse and

maps said velocity to a vertical and horizontal thumbstick position of a thumbstick on a gamepad style video game controller.

- [c8] 8. An apparatus comprising: a means for receiving signals from a computer pointing device; a means for transmitting signals to a video game console; and a computer pointing device code to video game controller code converter that converts computer pointing device codes received from a computer pointing device to video game controller codes that are transmitted to a video game controller input of a video game console.
- [c9] 9. The apparatus of claim 8 further comprising: a means for receiving signals from a computer keyboard; and a computer keyboard code to video game controller code converter that converts codes received from a computer keyboard to video game controller codes that are transmitted to a video game controller input of a video game console.
- [c10] 10. The apparatus of claim 8 further comprising: a computer pointing device displacement to video game controller thumbstick position converter that uses the vertical and horizontal displacement information received from a computer pointing device to calculate the velocity and direction of said computer pointing device and maps

said velocity to a vertical and horizontal thumbstick position of a thumbstick on a video game controller.

[c11] 11. The apparatus of claim 10 further comprising: a means for receiving signals from a computer keyboard; and a computer keyboard code to video game controller code converter that converts codes received from a computer keyboard to video game controller codes that are transmitted to a video game controller input of a video game console.

[c12] 12. The apparatus of claim 8 wherein said computer pointing device code to video game controller code converter also converts computer pointing device codes from a second computer pointing device to video game controller codes that are output to said means for transmitting signals to a video game console, and further comprising a means for receiving signals from said second computer pointing device.

[c13] 13. The apparatus of claim 12 further comprising: a means for receiving signals from a computer keyboard; and a computer keyboard code to video game controller code converter that converts computer keyboard codes received from a computer keyboard to video game controller codes that are transmitted to said video game controller input of a video game console.

[c14] 14. The apparatus of claim 12 further comprising: a computer pointing device displacement to video game controller thumbstick position converter that uses the vertical and horizontal displacement information received from a computer pointing device to calculate the velocity and direction of said computer pointing device and maps said velocity to a vertical and horizontal thumbstick position of a thumbstick on a video game controller.

[c15] 15. A method for adapting output from a computer pointing device to a video game console, the method comprising the steps of: determining when a user initiates an action on a computer pointing device; determining which video game controller code corresponds to a computer pointing device code; and mapping computer pointing device codes from said computer pointing device to a corresponding video game controller code of a video game controller; transmitting said corresponding video game controller code to said video game console; whereby codes generated by said computer pointing device are adapted to said video game console such that a user will be able to control a video game existing on said video game console by manipulating said computer pointing device.

- [c16] 16. The method of claim 15 further comprising the step of: mapping computer pointing device codes from a second computer pointing device to video game controller codes of said video game controller.
- [c17] 17. The method of claim 16 wherein said computer pointing device and said second computer pointing device are selected from the group consisting of computer mice and trackballs and touchpads and joysticks and light pens; and wherein said computer pointing device and said second computer pointing device are compatible with a personal computer.
- [c18] 18. The method of claim 16 further comprising the step of: mapping computer keyboard codes from a computer keyboard to video game controller codes of said video game controller.
- [c19] 19. The method of claim 15 further comprising the step of: mapping computer keyboard codes from a computer keyboard to video game controller codes of said video game controller.
- [c20] 20. The method of claim 15 further comprising the step of: computing the velocity and direction of said computer pointing device and mapping said velocity to a vertical and horizontal thumbstick position of a thumbstick

of said video game controller.

- [c21] 21. The method of claim 20 wherein said computer pointing device is selected from the group consisting of computer mice and trackballs and touchpads and joy-sticks and light pens; and wherein said computer pointing device is compatible with a personal computer.
- [c22] 22. The method of claim 15 further comprising the steps of: keeping a running count of the displacement of a computer pointing device along the X-axis of said computer pointing device; keeping a running count of the displacement of said computer pointing device along the Y-axis of said computer pointing device; adding X-axis displacement of said computer pointing device to said running count if said computer pointing device to its right; adding Y-axis displacement of said computer pointing device to said running count if said computer pointing device moved to its forward direction; subtracting X-axis displacement of said computer pointing device from said running count if said computer pointing device is moved to its left; subtracting Y-axis displacement of said computer pointing device from said running count if said computer pointing device is moved to its rearward direction; mapping said X-axis running count to the X-axis value of a gamepad thumbstick of a gamepad type video game controller; and mapping said

Y-axis running count to the Y-axis value of a gamepad thumbstick of a gamepad type video game controller.

[c23] 23. A method for providing computer pointing device input to a video game, the method comprising the steps of: using the motion data from a computer pointing device selected from the group consisting of computer mice and trackballs and touchpads and joysticks and light pens to control the direction of sight within a three dimensional computer graphics environment; and using the motion data from a second computer pointing device compatible with a personal computer selected from the group consisting of computer mice and trackballs and touchpads and joysticks and light pens to control the movement of the game character through a three dimensional computer graphics environment; and wherein said computer pointing device and said second computer pointing device are compatible with a personal computer.

[c24] 24. The method of claim 23 further comprising the step of: processing said motion data from said computer pointing device and said second computer pointing device and producing output data such that the video game perceives the data as coming from a single gamepad style video game controller.

[c25] 25. The method of claim 24 further comprising the step of: computing the velocity and direction of a computer pointing device and mapping said velocity to a vertical and horizontal thumbstick position of a thumbstick of said gamepad style video game controller.